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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,978	09/24/2003	Thomas Haas	032301.309	9246

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SMITH, GAMBRELL & RUSSELL, LLP  
1230 PEACHTREE STREET, N.E.  
SUITE 3100, PROMENADE II  
ATLANTA, GA 30309-3592

EXAMINER

LANGEL, WAYNE A.

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/669,978

Applicant(s)

HAAS ET AL.

Examiner

Wayne Langel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9-24-03
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schreyer et al in view of Logan et al, further in view of Signorini et al, even further in view of Tsao '689. Schreyer et al '580 discloses the process recited in applicants' claims, except for the steps of stabilizing the extracted aqueous hydrogen peroxide solution, and regenerating and purifying the working solution. (See the Figure and col. 4, line 1 to col. 6, line 1.) Logan et al disclose at col. 1, lines 50-72 that continuous working of the cyclic process for producing hydrogen peroxide leads to formation of a degraded working solution containing a complex mixture of degradation products, which can take no part in the production of hydrogen peroxide. It would be obvious from Logan et al to regenerate the working solution of Schreyer et al, since it would be inefficient to operate the process of Schreyer et al with non-useful quinine compounds present in the working solution. It would be further obvious from Signorini et al in view of Tsao '689 to stabilize the extracted aqueous hydrogen peroxide solution of Schreyer et al so as to obtain a hydrogen peroxide solution containing at least 100 wppm anions or compounds that can dissociate to form anions in total, since Signorini et al teach at col. 6, lines 50-56 stabilizing compounds may be added during the process for obtaining aqueous hydrogen peroxide solutions by the anthraquinone process, and Tsao '689 discloses at col. 3, lines 30-42 that stannates and phosphates are conventional stabilizers for

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hydrogen peroxide, i.e., stabilizers which would result in a hydrogen peroxide solution containing at least 100 wppm anions or compounds that can dissociate to form anions.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tsao '689. No distinction is seen between the composition disclosed by Tsao '689, and that recited in claims 1-15. Tsao '689 discloses at col. 2, lines 48-58 that the amine content may be as low as 0.003 wt. % and at col. 3, lines 30-42 that stabilizers such as ammonium stannate may be present in amounts up to about 0.1 wt.%. The composition of Tsao '689 would inherently contain less than 50 wppm alkali metals or alkaline earth metals, since there is no indication in Tsao '689 that such metals are present. In any event it would be obvious to provide less than 50 wppm alkali metals and alkaline earth metals in the composition, since Tsao teaches at col. 3, lines 30-42 that ammonium salts, rather than sodium salts, of the various stabilizers may be employed.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

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applicant regards as the invention. In claims 1 and 19, it is indefinite as to whether the "whereby" clauses provide positive limitations, since the limitations recited in these "whereby" clauses are not necessary results of the positive limitations recited in the remainder of the claims. In claim 19, it is indefinite as to whether the resulting aqueous hydrogen peroxide solution is required to have the concentrations of impurities as recited in lines 2-7 of claim 19.

The other references are made of record for disclosing purified solutions of hydrogen peroxide and/or methods for producing hydrogen peroxide by the anthraquinone process.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Langel whose telephone number is 571-272-1353. The examiner can normally be reached on Mondays to Fridays from 8 to 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, reading "Wayne A. Langel". The signature is written in a cursive style with a large, stylized "L" and "A".

Wayne Langel  
Primary Examiner  
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